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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,756	01/17/2002	Mark Leonard Bonko	DN1999165USA	8345

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EXAMINER

MAKI, STEVEN D

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/031,756</p>	<p>Applicant(s)</p> <p align="center">BONKO, MARK LEONARD</p>	
	<p>Examiner</p> <p align="center">Steven D. Maki</p>	<p>Art Unit</p> <p align="center">1733</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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- 1) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2) Claims 5 and 7-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 5 and 11, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the subject matter of the entire sidewalls being substantially flat. Although the original disclosure describes the sidewalls (17,18) as being molded substantially flat (see page 6), the original disclosure states "[i]n the lower portion of the sidewalls (17,18) is an annular projection (28)". Hence, the annular projection 28 is part of the sidewall. As can be seen from figure 3, the annular projection 28 is not flat. The original disclosure fails to reasonably convey shaping the sidewall such that the *entire* sidewall including the annular projection is flat.

In claim 7, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the subject matter of the tread width being about "about equal" to the

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maximum section width. The subject matter of the tread width being *about equal* to the maximum section width includes tread widths which are smaller than the maximum section width. Smaller tread widths are inconsistent with the original disclosure (and therefore not reasonably conveyed) since the original disclosure teaches using a tread width "greater than or equal to" to make it difficult for stubble to contact the sidewall.

In claims 8-10 and 12, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the new matter) is the *combination* of (1) the subject matter of claim 7 (TW being equal to SW) *and* (2) the subject matter of dependent claims 8-10 and 12. Each of claims 8-10 and 12 are directed to the embodiment where $TW > SW$ instead of the embodiment where $TW = SW$. The original disclosure fails to reasonably convey using the buttress 15 and radius R1 when $TW = SW$.

3) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4) Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 7 and 14, the scope of "a portion of said radially inwardly extending sidewalls are substantially flat in the uninflated condition" is unclear. In particular, it is unclear if one or both sidewalls must have a substantially flat portion. In claims 1 and 7, it is suggested to change "a portion of said radially inwardly extending sidewalls are

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substantially flat in the uninflated condition" to --a portion of each of said radially inwardly extending sidewalls is substantially flat in the uninflated condition--.

In claim 6 (dependent on claim 3), there is no antecedent basis for "the tread buttress". Claim 3 describes "an annular shoulder buttress" instead of a "tread buttress".

In claim 13 line 5, there is no antecedent basis for "the tread buttress". Line 3 of claim 13 describes "an annular shoulder buttress" instead of "tread buttress".

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Great Britain

6) Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain (GB 115945) in view of "Rubber Technology" (Rubber Technology and Manufacture: Tyre constructions) and "Elastomerics" (Elastomerics article: How Technological Innovations Have Affected the Tire Industry's Structure").

Great Britain discloses a pneumatic tire having a carcass and a tread and a pair of sidewalls wherein when the tire is inflated and mounted on a rim, the tread width is greater than the section width of the tire. See figure 1. Great Britain teaches that the sidewalls of the tire are protected from injury by the wide tread. See page 4 lines 31-34. Great Britain's tread has circumferential grooves as claimed since Great Britain provides the tread with cavities 12, 13, 14 and 15, which may be endless. See page 5 line 55 to

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page 6 line 4. Also, Great Britain teaches strengthening and stiffening each tire wall close to the base beads with an endless rubber rib 10, 11. See page 5 lines 16-18. Although Great Britain teaches that the tire may be built in any well known manner with cord (page 5 line 24-26), Great Britain is silent as the carcass comprising two or more bias plies.

When the sidewalls have the same thickness, the claimed amount being at least 50% of total sidewall thickness means that the distance that the tread extends beyond the sidewall is at least equal to the sidewall thickness. In figure 1 of Great Britain, the illustrated distance that the tread extends beyond the sidewall is greater than the illustrated thickness of the sidewall. In any event: it would have been obvious to one of ordinary skill in the art to provide the tread with a width such that "the sidewalls in the uninflated condition are located axially inward of the tread buttress by an amount at least half the total thickness of the sidewalls" in view of Great Britain's teaching that the wide tread protects the thin sidewalls from injury. No unexpected results of protecting the tire sidewalls using a wide tread over Great Britain have been shown. Furthermore, it would have been obvious to one of ordinary skill in the art to provide Great Britain's tire with a carcass comprising two or more bias plies since (1) Great Britain suggests using any well known tire construction and (2) a bias tire (a pneumatic tire having a carcass comprising two or more bias plies wherein the first ply having cords oriented substantially equally but opposite relative to the cords of the second ply) is a well known type of tire as evidenced by Rubber Technology and Elastomerics. In claim 13, the

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description of "pneumatic agricultural tire" and "implement tire" fails to require tire construction not suggested by the above applied prior art.

Swiss

7) Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swiss in view of Tyre Technology by French.

Swiss shows a tire having a flat tread and flat sidewalls. See figure. The following information was obtained during a partial oral translation of Swiss by a PTO translator: The title is "Pressurized Air Tire". The prior art tire has a tendency to slip sideways when the road is wet. Prior attempts to solve this problem have failed because all tires are round. The object of the invention is to prevent slipping by providing a tread of the jacket with a cylindrical surface. In this case, the shape of the tread a of the projective jacket A is significantly more in the direction of the wheel axis. Furthermore, the sidewalls b remain planar so that this jacket at location c-c has significant reinforcement or increased rigidity due to the gathering of material and that prevents tear. These locations are where the tire expands and wears. The reinforced portions prevent wear and tear.

As to the radially extending sidewalls being "substantially flat in the uninflated state", see flat sidewalls in the figure. In any event: As to claims 7 and 11, it would have been obvious to one of ordinary skill in the art to provide Swiss's tire such that the sidewalls are "substantially flat in the uninflated state" since Swiss, which illustrates flat sidewalls, teaches using planar sidewalls to prevent tear. Claims 7 and 11 fail to exclude said flat portion of the sidewall being flat in both the inflated and uninflated

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state. As to the grooves, it would have been obvious to one of ordinary skill in the art to provide Swiss's tire with the claimed circumferential grooves since it is well known in the tire art to form circumferential grooves in a tread in order to improve lateral grip / wet grip as evidenced by French (page 125). As to the carcass, it would have been obvious to one of ordinary skill in the art to provide Swiss' tire with a carcass comprising two or more bias plies since a bias tire (a pneumatic tire having a carcass comprising two or more bias plies wherein the first ply having cords oriented substantially equally but opposite relative to the cords of the second ply) is a well known type of tire as evidenced by French (page 3+).

Brunner

8) Claims 1-3, 5-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner (US 2340258) in view of French and Great Britain and optionally at least one of Swiss and Walker (US 5533793).

Brunner discloses a tire to be used on the front wheel of a tractor (a farm implement tire) having circumferential grooves. At page 2 top right, Brunner teaches providing the sidewall with ribs 18 intermediate the tread and bead areas to prevent weakening of the sidewalls by abrasion. The surface of the rib 18 is illustrated as being flat. The tire has a carcass 11. Brunner is silent as to that carcass being a bias carcass. However, it would have been obvious to one of ordinary skill in the art to use a bias carcass as the carcass 11 of Brunner's tire since French, which recognizes the use of circumferential grooves on front tractor tires, suggests using bias carcass construction for agricultural tires. Brunner does not recite using a wide tread.

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As to claims 1, 7 and 13, it would have been obvious to one of ordinary skill in the art to form Brunner's tread such that when the tire is normally inflated and mounted on a rim, the tread width is greater than the maximum section width since Great Britain, which like Brunner is concerned with the problem of sidewall injury, suggests forming the tread such that the tread width is greater than the maximum section width of the tire to prevent injury to the sidewalls. No unexpected results of protecting the tire sidewalls using a wide tread over Great Britain have been shown.

As to "a portion of said radially extending sidewalls are substantially flat in the uninflated condition, note the flat surfaces of the ribs 18. In any event: As to claims 1 and 7, it would have been obvious to one of ordinary skill in the art to shape the sidewalls of Brunner's tire such that at least a portion of the sidewall is flat when the tire is in the uninflated condition since (1) Swiss, which like Brunner is concerned with the problem of sidewall injury, suggests using flat sidewalls for a pneumatic tire to prevent sidewall injury (tearing of the sidewall) and/or (2) Walker, directed to an agricultural tire, teaches using flat sidewalls in an agricultural tire having a "wide tread" (figure 3, col. 5 lines 6-7). Claims 7 and 11 fail to exclude said flat portion of the sidewall being flat in both the inflated and uninflated state.

As to claims 2 and 8, the claimed annular concavity defined by a single radius R1 would have been obvious since Great Britain shows forming a curved annular cavity between the surface of the tread and the maximum section width so as to connect the buttress and the sidewall.

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As to claims 3 and 9, Great Britain suggests the claimed buttress; Great Britain showing a "buttresses" defined by the safety part of the tread 1, 2.

As to claims 5 and 11, it would have been obvious to shape the entire sidewall flat in view of the above noted suggestion from Swiss and/or Walker to use flat sidewalls.

As to claims 6 and 12-14, it would have been obvious to one of ordinary skill in the art to provide the tread with a width such that "the sidewalls in the uninflated / molded condition are located axially inward of the tread buttress by an amount at least half the total thickness of the sidewalls" in view of Great Britain's teaching that the wide tread protects the thin sidewalls from injury. No unexpected results of protecting the tire sidewalls using a wide tread over Great Britain have been shown.

9) Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner in view of French and Great Britain and optionally at least one of Swiss and Walker as applied above and further in view of Japan '029 (JP 4-153029) or Swan (US 1428817).

As to claims 4 and 10, it would have been obvious to locate an annular groove in the buttress in view of either Japan '029's suggestion to locate annular grooves in a protruding buttress (figure 3) of a tire having improved durability or Swan's teaching to locate annular grooves formed by convex ribs in a buttress region of a tire so that the tire can climb out of ruts.

Remarks

10) Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

German '588 (DE 2127588) is cited of interest. No abstract of German '588 is readily available to the examiner. However, Girault et al (US 6499521) describes German '588 at col. 2 lines 28-36. In particular, Girault et al describes German '588 as disclosing a pneumatic racing car tire having a crossply (bias construction) wherein the "sidewalls are substantially flat and vertical in an un-inflated tire". Figures 1 and 2 of German '588 do not illustrate the racing car tire as having circumferential grooves. There is no motivation to provide German '588's racing car tire as a pneumatic agricultural implement tire having a tread width wider than the maximum section width.

As to applicant's argument that none of the references teach sidewall portions which are flat in the inflated condition, note the new ground of rejection. In particular, note the teaching of a portion of the sidewall being flat in newly cited Brunner, Swiss and Walker.

11) No claim is allowed.

12) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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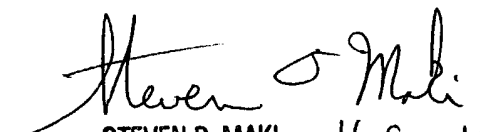
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
April 8, 2004


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
Av 1733 4-8-04